

REMARKS

Claims 53-54 are amended. Claims 53-61 are pending in the application.

Claims 53-57 and 59 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hsiao U.S. Patent No. 5,946,568; in combination with Huster U.S. Patent No. 6,242,329. The Examiner is reminded by direction to MPEP §2143 that a proper obviousness rejection has the following three requirements: 1) there must be some suggestion or motivation to modify or combine reference teachings; 2) there must be a reasonable expectation of success; and 3) the combined references must teach or suggest all of the claim limitations. Claims 53-57 and 59 are allowable over Hsiao in combination with Huster for at least the reason that the references, individually or as combined, fail to disclose or suggest each and every limitation in any of those claims.

As amended, independent claim 53 recites first and second diffusion regions extending an initial distance under spacers associated with a first gate stack, and extending the first diffusion region relative to the initial distance without extending the second diffusion region, where the extending comprises implanting a heavy p-type dopant. The amendment to claim 53 is supported by the specification at, for example, Figs. 22-24 and the text at paragraphs 102-106. Claim 53 is additionally amended to provide improved clarity. Hsiao discloses forming word blinds 34 and 36 associated with source/drain regions 44A and 44B (Fig. 5; and the accompanying text at Col. 3 line 47-Col. 4 line 27). Hsiao indicates that the source/drain regions have a lightly doped portion 40A and 40B and heavily doped regions 44A and 44B, and indicates that the lightly doped regions are formed by implanting phosphorus, and the heavily doped regions are formed by implanting arsenic (Col. 4 lines 4-23). Hsiao does not disclose or suggest the claim 53 recited

extending a first diffusion region relative to an initial distance without extending a second diffusion region where the extending comprises implanting a heavy p-type dopant.

Huster discloses forming a source side halo 120 utilizing a complimentary type dopant and indicates utilization of n-type dopants such as phosphorus or arsenic, or a p-type dopant such as boron (Col. 3 lines 24-36). As combined with Hsiao, the Huster disclosure of an extension which can utilize a p-type dopant such as boron does not contribute towards suggesting the claim 53 recited extending a first diffusion region relative to an initial distance without extending the second diffusion region, where the extending comprises implanting a heavy p-type dopant. Accordingly, independent claim 53 is not rendered obvious by a cited combination of Hsiao and Huster, and is allowable over these references.

Dependent claim 54 is amended to properly depend from independent claim 53. Dependent claims 54-57 and 59 are allowable over Hsiao and Huster for at least the reason that they depend from allowable base claim 53.

Claims 58 and 60-61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Hsiao and Huster in further combination with one of Huang U.S. Patent No. 6,187,624, or Iwamatsu U.S. Patent No. 5,440,161. As indicated, at page 5-6 of the present Action, Huang is relied upon as disclosing an isolation region between gates which can utilize shallow trench isolation. As indicated at page 6-7 of the present Action, Iwamatsu is relied upon as disclosing an isolation region having a doped pocket region. However, the isolation regions disclosed by Huang and Iwamatsu do not contribute toward suggesting the claim 53 recited extending of a first diffusion region by implanting a heavy p-type dopant without extending a second diffusion region associated with a gate stack.

Accordingly, independent claim 53 is not rendered obvious by Hsiao and Huster as further combined with either Huang or Iwamatsu. Dependent claims 58 and 60-61 are allowable over the various cited combinations of Hsiao, Huster, Huang, and Iwamatsu or at least the reason that they depend from allowable base claim 53.

For the reasons discussed above, claims 53-61 are allowable. Accordingly, applicant respectfully requests formal allowance of claims 53-61 in the Examiner's next action.

Respectfully submitted,

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